

Location Honolulu, Oahu SW → 21° 05' N ; 158° 19' W
 Observer Crossin et. al. Date 4 Nov. 1966 Time 1435 to 1754
 Weather scattered showers, heavy overcast Miles 28 Hours 3.32

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	194	1 dark phase, rest light.
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	3	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	3	
Bulwer's Petrel		
Leach's Storm Petrel	1	
WRSP Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	3	
Red-footed Booby	24	2 imm., all light phase
Great Frigatebird	38	
Lesser Frigatebird		
Golden Plover		Shear - Pet = 383
Ruddy Turnstone		Storm - Pet = 1
Sooty Tern		Tern = 42
Gray-backed Tern		Booby = 27
Common Noddy Tern	41	Frigate = 39
Fairy Tern		Jaeger = 39
Pomarine Jaeger	39	14 light phase, 1 dark, 1 intermediate.
<u>Pterodroma</u> sp.	2	
<u>Shear - pet</u>	181	most likely Wedgetails.
<u>Frigate</u> sp.	1	
<u>Hawaiian Noddy</u>	1	
		Total Birds 531
		Total Sightings
		Total Flocks 8 (471)
		Total Species 10

FLOCKS

<u>Time</u>	<u>No.</u>	<u>composition</u>	<u>Flock TYPE</u>
1445	14	GF	T
1445	19	RFB	T
1445	5	PJ.	T
1455	23	GF	T
1505	18	PJ.	T
1540	195	WT 150 CN 40 RFB 4 GF 1	Feeding
1706	22	WT	T
1707	<u>175</u>	Shear-Pet (arb. WT)	Feeding

Total (471)

Number and percentage of species groups in Flocks

Shear-Pet	(347)	73.7%
Tern	(40)	8.5%
Booby	(23)	4.9%
Frigate	(38)	8.0%
Jaeger	(23)	4.9%

Location 20°-06'N; 159°-58'W — 19°-09'N; 161°-31'W
 Observer Crossin et. al. Date 5 Nov. 66 Time ^{SR}0538 to ^{SS}1708
 Weather completely overcast, some light rain Miles 108 Hours 11.5 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	47	6 light phase, rest ?
Sooty Shearwater	2	
Slender-billed Shearwater	42	
^{3/4} ^{S/SB} Christmas Island Shearwater	116	
Newell's Shearwater		
Juan Fernandez Petrel	3	2 Sperm Whales (Physeter catodon)
White-necked Petrel Pterodroma externa	2	
Kermadec Petrel	2	
Phoenix Island Petrel		
Mottled Petrel	1	
Bonin Island Petrel		
Black-winged Petrel	32	
Bulwer's Petrel	1	
^{WR} Leach's Storm Petrel	4	
Red-tailed Tropicbird		
White-tailed Tropicbird	2	
Blue-faced Booby	2	
Brown Booby	1	
Red-footed Booby	2	
Great Frigatebird	2	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	15	all adults recorded.
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	1	Shear-Pet = 308
Pomarine Jaeger		Tern = 18
Pterodroma sp.	3	Storm Petrel = 5
Shear-Pet	57	Tropicbird = 2
Storm-Petrel sp.	1	Booby = 5
Tern sp.	2	Frigate = 2
Jaeger sp.	2	Jaeger = 2
Bird sp.	54	Bird = 54
		Total Birds 396
		Total Sightings
		Total Flocks 12 (285)
		Total Species 17

Flocks

0811	8	s/p.	TF
1010	6	ST 2 BWP 4	FEEDING TF
1028	48	s/sb	TF
1032	14	s/b SH.	TF
1110	17	s/sb	TF
1310	5	BWP 4 KP 1	TF
1425	50	Birds	TF
1430	5	s/sb	TF
1505	63	WT 40 s-p 20 ST 2 KP 1	TF
1520	22	s-p 20 ST 2	TF
1558	25	s/sb	TF
1604	22 <u>285</u>	s/sb	TF

Number and % of species groups in flocks.

Shear Pet	(229)	80.4%
(Sooty/Slenderbills)	(114)	(40.0%)
Terns	(6)	2.1
Unknown	(50)	17.5
		<u>100.0</u>

Location $18^{\circ}04'N; 163^{\circ}25'W$ — $17^{\circ}07'N; 164^{\circ}58'W$
Observer Crossin et al. Date 6 Nov. 1966 Time 0555^{SR} to 1729^{SS}
Weather nearly continuous squall activity throughout day. Miles 106 Hours 11.6

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	12	10 Light phase 2?
Sooty Shearwater	4	
Slender-billed Shearwater	2578	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	15	
White-necked Petrel P. externa	7	
Kermadec Petrel	1	
Phoenix Island Petrel Tahitian	1	
Mottled Petrel	8	
Bonin Island Petrel		
Black-winged Petrel	19	
Bulwer's Petrel	1	
Leach's Storm Petrel	1	
Red-tailed Tropicbird	1	
White-tailed Tropicbird	1	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	2	
Great Frigatebird	1	
Lesser Frigatebird		
Golden Plover	1	
Ruddy Turnstone		
Sooty Tern	3	
Gray-backed Tern Tern sp.	1	probably Arctic
Common Noddy Tern		
Fairy Tern		Storm Pet = 6
Pomarine Jaeger		Shear-Pet = 2665
White-winged Petrel	1	Tern = 4
Pterodroma sp.	11	Tropicbird = 3
White-rumped S.P.	5	Booby = 2
White-necked Petrel	1	Frigate = 3
Pale-footed Shearwater	1	Shorebird = 1
Shear Pet	5	Duck = 1 Misc = 1
Bird sp.	1	Total Birds 2686
Pin tail Duck	1	Total Sightings
Tropicbird sp.	1	Total Flocks 56 (2547) ALL
Frigatebird sp.	2	Total Species 20 2-6/5/4 20

Flocks

all

Slender-billed Shearwater

100% shear Pet in flocks.

ALL Traveling Flocks.

1441	50
1442	50
1443	20
1444	17
1445	27
1450	40
1500	40
1502	20
1503	10
1505	12
1601	18
1611	11
1627	60
1654	30
1725	30

56

(2547)

0602	9
0610	25
0616	20
0622	25
0631	12
0633	18
0634	15
0637	60
0649	60
0654	65
0655	10
0656	20
0657	18
0654	35
0701	20
0710	25
0711	25
0712	30
0717	100
0807	8
0908	115
0940	10
1003	52
1025	15
1036	40
1042	120
1229	112
1237	13
1300	35
1315	225
1320	5
1340	175
1355	50
1406	15
1407	15
1409	10
1415	25
1416	15
1417	5
1431	60
1440	400

Location $16^{\circ}-00'N; 166^{\circ}-50'W$ — $15^{\circ}-06'N; 168^{\circ}-26'W$
Observer Crossin et al. Date 7 Nov. 1966 Time ^{SR}0604 to ^{SS}1742
Weather partly cloudy, sea calm enough to run'skiff. Miles 109 Hours 11.6

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	10	all light phase.
Sooty Shearwater	5	
Slender-billed Shearwater	198	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	34	10 collected.
White-necked Petrel	2	
Kermadec Petrel	2	1 collected.
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	51	8 collected
Bulwer's Petrel		
Leach's Storm Petrel	1	collected.
Red-tailed Tropicbird	3	
White-tailed Tropicbird	2	1 collected
Blue-faced Booby		
Brown Booby		
Red-footed Booby	1	
Great Frigatebird	3	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>Pterodroma</i> sp.	8	Shear Pet = 318
<i>Pterodroma externa</i>	3	Storm Pet = 7
Shear pet	5	Tern = 4
White-rumped SP.	6	Tropicbird = 7
Tropicbird sp.	2	Booby = 1
Tern sp.	3	Frigate = 3
Jaeger sp.	2	Jaeger = 2
Bird sp.	1	Misc = 1
		Total Birds 343
		Total Sightings
		Total Flocks 14(193)
		Total Species 13

Flocks

Sooty / slender-billed

0640	14
0652	5
0658	29
0658	7
0750	5
0858	12
0937	20
1051	6
1052	8
1052	17
1143	18
1325	38
1735	5

$$193 - 9 = 184$$

13(184)

14(193)

100% sheer Pet.
96.4% = s/sb.

0850	BWP	5
	JFP	1
	KP	1
	S/sb: sb	2
		<u>9</u>
		1

Nocturnal

Location $15^{\circ}06'N; 168^{\circ}26'W$ — $16^{\circ}08'N; 169^{\circ}22'W$
 Observer Crossin et al. Date 7-8 Nov 1966 Time ^{SS}1742 to ^{SR}0615
 Weather mostly clear, wind ca. 10k. Miles 121 Hours 12.6

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater	1	
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	5	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	5	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	2	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pterodroma sp.	7	Shear-Pet = 22
		Tern = 2
		Misc = 5
Shear-Pet	4	
Bird sp.	5	
		Total Birds 29
		Total Sightings
		Total Flocks 0
		Total Species 4

16°-45'N; 169°-32'W

Location 16°-06'N; 169°-22'W To Johnston Atoll ^{SR} J.A.

Observer Crossin et al. Date 8 Nov 1966 Time 0615 to 0950

Weather Squalls all about Miles 40 Hours 3.6

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	11	
Sooty Shearwater / SB	4	
Slender-billed Shearwater	3	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	3	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel	1	
Bonin Island Petrel		
Black-winged Petrel	4	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	1	
Red-footed Booby		
Great Frigatebird	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
<i>Pterodroma</i> sp.	1	
Shear-Pet	4	
		Shear Pet = 31
		Tern = 1
		Booby = 1
		Frigate = 1
		Total Birds 34
		Total Sightings
		Total Flocks 0
		Total Species 8

Location Johnston Atoll →

16° 29' N; 169° 49' W

Observer Crossin et al.

Date 11 Nov 1966 Time 1520^{JA} to 1744^{SS}

Weather scattered squalls on horizon.

Miles 22

Hours 2.4

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	5	4 light phase, 1?
Sooty Shearwater	1	
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	7	4 w/ orange streamers
Red-footed Booby		
Great Frigatebird	5	1 w/ orange streamer
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	2	
Gray-backed Tern		
Common Noddy Tern	8	1 w/ orange streamer
Fairy Tern		
Pomarine Jaeger		
Shear Pet	2	shear-Pet = 9
White-rumped SP	1	storm-Pet = 2
Bird	4	Tern = 10
		Booby = 7
		Frigate = 5
		Misc = 4
		Total Birds 37
		Total Sightings
		Total Flocks 6
		Total Species 8

Nocturnal

Location 16°-29'N; 169°-49'W — 15°-11'N; 171°-33'W
 Observer Crossin et al. Date 11-12 Nov 1966 Time 1744^{SS} to 0615^{SR}
 Weather scattered clouds. Miles 125 Hours 12.5

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel	1	collected, flew on ship.
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	3	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Small Pterodroma	5	
Large Pterodroma	2	
Shear Pet	9	
Jaeger sp.	1	
Tern sp.	2	
Bird sp.	1	
		Total Birds 25
		Total Sightings
		Total Flocks 0
		Total Species 6

Shear - Pet = 17
 Storm Pet = 1
 Tern = 5
 Jaeger = 1
 Misc. = 1

Northern Grid

Location	15° 11' N; 171° 33' W — 13° 56' N; 173° 09' W		
Observer	Crossin et al.	Date	12 Nov. 66 Time 0615 to 1802
Weather	Mostly clear, choppy swells	Miles	120
		Hours	11.8

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater S/SB	34	
Slender-billed Shearwater	30	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	29	
White-necked Petrel P. externa	1	
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	50	
Bulwer's Petrel		
Leach's Storm Petrel	4	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird	4	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pterodroma sp.	3	
White-rumped SP	6	
Bird	1	
	Total Birds	163
	Total Sightings	
	Total Flocks	7(122)
	Total Species	6

Flocks

0740	41	JFP 20	
		BWP 15	Feeding
		WRSP 5	
		LSP 1	

0740	18	S/Sb	TF
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0750	13	S/Sb	TF
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08 ²⁴ 45	13	BWP 12	Feeding
		LSP 1	

0940	9	BWP	Feeding
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1532	6	S/Sb = sbS	TF
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1545	22	sbS	TF
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(7)	122		
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Location $12^{\circ}42'N$; $174^{\circ}46'W$ — $11^{\circ}31'N$; $176^{\circ}16'W$
Observer Crossin et al. Date 13 Nov. 1966 Time 06⁵²37 to 18³⁵19
Weather intermittent squall activity Miles 11.3 Hours 11.7 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	light phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		skiff run from 1245 - 1625
Newell's Shearwater		
Juan Fernandez Petrel	15	1 collected
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	19	4 collected
Bulwer's Petrel		
Leach's Storm Petrel	3	
white-rumped Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover	2	
Ruddy Turnstone		
Sooty Tern	9	1 coll. imm. 943-23575 ^{E+WL}
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Pale-footed Shearwater	1	Shear-Pet = 44
Pterodroma sp.	2	Storm Pet = 3
Shear-Pet	6	Tern = 10
Noddy sp.	1	Tropicbird = 1
Jaeger sp.	1	Shorebird = 2
		Jaeger = 1
		Total Birds 61
		Total Sightings
		Total Flocks 1 (11)
		Total Species 10

Flocks

1215

11

ST

5

SP

6

TF(SF)

Location $10^{\circ}-34'N$; $177^{\circ}-50'W$ — $9^{\circ}-24'N$; $179^{\circ}-25'W$
Observer Crossin et. al. Date 14 Nov. 66 Time 0646^{SR} to 1835^{SS}
Weather mostly clear, sea calm as glass toward sunset Miles 118 Hours 11.8

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	3	2 light phase, 1 dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	Skiff run from 1228-1605
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	24	1 coll. 75 <u>Stenella</u> <u>raseiventris</u>
Bulwer's Petrel	4	2 coll. 1 collected.
Leach's Storm Petrel	2	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
White-winged Petrel	1	Shear-Pet = 40
<u>Pterodroma</u> sp.	7	Storm-Pet = 2
Pet Sharp-tailed Sandpiper	1	Tern = 1
Bird sp.	1	Tropicbird = 1
		shorebird = 1
		misc = 1
		Total Birds 46
		Total Sightings
		Total Flocks 0
		Total Species 9

Location $8^{\circ}12'N$; $178-08E$; $7^{\circ}06'N$; $178^{\circ}24'E$
Observer *Crossin et. al.* Date *16 Nov 1966* Time *0655^{5P}* to *1846^{5P}*
Weather *mostly clear, sea calm.* Miles *103* Hours *11.9*

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	39	<i>4 coll. 2 LP, 2 DP</i>
Sooty Shearwater <i>/sb</i>	2	<i>26 dark phase, 10 light phase, 3?</i>
Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel	1	<i>#2559 collected - I believe this to be Herald's</i>
Phoenix Island Petrel <i>Habitat</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	8 10	<i>1 coll.</i>
Bulwer's Petrel	6	<i>all collected.</i>
Leach's Storm Petrel	3	<i>3 collected</i>
Red-tailed Tropicbird	1	<i>coll.</i>
White-tailed Tropicbird	5	<i>1 coll.</i>
Blue-faced Booby		
Brown Booby	1	<i>coll.</i>
Red-footed Booby	1	<i>coll.</i>
Great Frigatebird <i>sp.</i>	2	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	58	<i>10 coll., 1 Imm, 1 SA, 8 Ad.</i>
Gray-backed Tern		
Common Noddy Tern	3	<i>1 coll. Shear-Pet = 83 83</i>
Fairy Tern	1	<i>Storm-Pet = 3</i>
Pomarine Jaeger	1	<i>coll. Tern = 64</i>
<i>Pale-footed Shear</i>	1	<i>Tropicbird = 6</i>
<i>Shearwater sp.</i>	3	<i>Booby = 2</i>
<i>Pterodroma externa</i>	1	<i>Frigate = 2</i>
<i>White-winged Petrel</i>	9 8	<i>Jaeger = 3</i>
<i>Herald's Petrel</i>	1	
<i>Pterodroma sp.</i>	10	
<i>Jaeger sp.</i>	2	Total Birds <i>163</i>
<i>Tern sp.</i>	2	Total Sightings
		Total Flocks <i>2 (59)</i>
		Total Species <i>20</i>

Flocks

1204 6 ST TF

1636 53 ST 30

WT 15

Pterop 5

J-go 2

Fgo 1

Feeding

2(59)

Nocturnal

Location	7°-06'N; 178°-24'E — 5°-50'N; 179°27'E		
Observer	Crossin et. al.	Date	15-16 Nov 66
Weather	mostly clear	Time	1846 to 0655
	Miles	95	Hours 12.2

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater / <i>sb</i>	<i>1</i>	
Slender-billed Shearwater	<i>2</i>	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	<i>1</i>	
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	<i>11</i>	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		<i>Shear-Pet = 5</i>
Pomarine Jaeger		<i>Tern = 12</i>
<i>Shear Pet</i>	<i>1</i>	<i>Tropicbird = 1</i>
<i>Tropicbird sp.</i>	<i>1</i>	<i>Misc. = 3</i>
<i>Tern sp.</i>	<i>1</i>	
<i>Bird sp.</i>	<i>3</i>	
		Total Birds <i>21</i>
		Total Sightings
		Total Flocks <i>0</i>
		Total Species <i>4</i>

Location 05°-50'N; 179°-27'E; 4°-51'N; 179°-48'W
 Observer Crossin et al Date 16 Nov. 1966 Time 0655^{SR} to 1843^{SS}
 Weather intermittent light squalls Miles 117 Hours 11.8

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	33	2 dark phase coll. 24 dark phase, 4 light phase, 5 unknown
Sooty Shearwater / <u>sb</u>	29	
Slender-billed Shearwater	48	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel	2	
Kermadec Petrel	1	
Phoenix Island Petrel / <u>tahitian</u>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel	4	
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird	3	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	2	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	121	parasitizing Sooty Tern
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	17	
Long-tailed Pomarine Jaeger	1	
White-winged Petrel	9	1 coll.
<u>Pterodroma</u> sp.	11	
Shear - Pet	2	
Small <u>Pterodroma</u>	9	
white-rumped S.P.	12	
Skua	1	
Bird	1	
		Total Birds 318
		Total Sightings
		Total Flocks 16 (216)
		Total Species 15
		Feeding Flocks = 4 (106)

Flocks

0717	17	ST 9 WT 6 FT 1 BWP 1	Feeding
0758	5	WT 1 WRSP 3 Pterosp. 1	SF
0807	9	S/sb 2 WT 3 ST 1 Sm. Ptero. 3	SF
0852	5	sbs	TF
0912	6	S/sb	TF
0924	22	sbs	TF
1015	9	S/sb	TF
1230	5	S/sb 4 WT 1	TF
1325	9	WNP 1 WT 2 ST 5 P.sp. 1	SF
1353	61	ST 46 FT 16 WRSP 1 BWP 1 RFB 2 WT 4 LTJ 1	Feeding
1417	12	ST 11 WT 1	SF
1510	7	S/sb	TF
1520	9	ST 4 WT 3 Sm Ptero 2	Feeding
1527	15	ST	TF
1532	6	ST	TF
1725	19	ST 18 P.sp. 1	Feeding

last day before Southern Grid

Location 03°-49'N; 179°-11'W — 02°-23'N; 178°-43'W
 Observer Crossin et al. Date 17 Nov. 1966 Time 0638 to 1837
 Weather Mostly clear Miles 90 Hours 12.0

SPECIES	NUMBERS	REMARKS
Laysan Albatross	5	
Black-footed Albatross		
Wedge-tailed Shearwater	32	all dark phase
Sooty Shearwater	1	
Slender-billed Shearwater	61	
S/S Christmas Island Shearwater	28	
Newell's Shearwater		
Juan Fernandez Petrel	1	
White-necked Petrel	2	
Kermadec Petrel		
Phoenix Island Petrel / Tahitian	2	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	14	
Bulwer's Petrel	3	
Leach's Storm Petrel	5	
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird 8	1	
Lesser Frigatebird	1	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	80	
Gray-backed Tern		Shear - Pet = 165
Common Noddy Tern		Storm - Pet = 12
Fairy Tern		Tern = 80
Pomarine Jaeger		Tropicbird = 3
Pterodroma sp.	12	Frigate = 2
White-rumped Storm Petrel	7	Bird = 3
Shear-Pet	5	
White-winged Petrel	4	
Bird	3	
		Total Birds 265
		Total Sightings
		Total Flocks 14 (142)
		Total Species 12

FLOCKS

0740	5	Sb	TF
0745	6	S/Sb	TF
0758	5	Sb	TF
0850	15	ST	SF
0923	5	ST	SF
0957	7	ST	SF
1140	11	ST 10 WT 1	TF
1205	15	Sb	TF
1238	5	ST	SF
1255	9	ST 3 WT 6	Feeding
1314	9	S/Sb	TF
1358	31	ST 30 P. 8 1	Feeding
1405	6	S/Sb	TF
1406	13	Sb	TF

14 (142)

Nocturnal
1st night 50.

Location	02-23 N; 178-43 W — 01-28 ⁴ N; 177- 35 W		
Observer	Crossin et. al.	Date	17-18 Nov 60
Weather		Time	1837 ^{SS} to 0552 ^{ship}
	Miles	90	Hours 11.3

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	2	dark phase
Sooty Shearwater	1	
Slender-billed Shearwater	2	
s/sb Christmas Island Shearwater	1	
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	3	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear - Pet = 12
Pomarine Jaeger		Tern = 3
<u>Pterodroma</u> sp.	6	Misc = 3
Bird	3	
		Total Birds 88 10
		Total Sightings
		Total Flocks 0
		Total Species 5

Southern Grid
First day.

Location 01-25 N; 177-35 W — 00-58 N; 176-20 W
 Observer Crossin et. al. Date 18 Nov. 1966 Time 0638 to 1833
 Weather heavy wind, seas rough. Miles 90 Hours (11.9 - 1.3 hrs. at Howland)
= 10.6 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	8	ALL dark phase
Sooty Shearwater	2	
Slender-billed Shearwater	147	
SIB Christmas Island Shearwater	78	
Newell's Shearwater		
Juan Fernandez Petrel	4	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / Tahitian	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	9	
Bulwer's Petrel		
WR Leach's Storm Petrel	1	
Red-tailed Tropicbird	2	
White-tailed Tropicbird		
IBP, IBS Blue-faced Booby	131	1 ad w/ blue paint, 1 ad. Blue streamered
Brown Booby	32 2	
Red-footed Booby	1	
Great Frigatebird sp.	51	
Lesser Frigatebird	2	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	211	
Gray-backed Tern		
Common Noddy Tern		Shear - Pet = 258
Fairy Tern		Storm - Pet = 1
Pomarine Jaeger		Tern = 211
White-winged Petrel	3	Tropic bird = 2
<u>Pterodroma</u> sp.	5	Booby = 134
		Frigate = 53
Shear - Pet	1	
		Total Birds 659
		Total Sightings
		Total Flocks 22 (515)
		Total Species 14

Feeding Flocks = 2 (322)

Flocks

0652	5	sb	TF
0740	7	sb	TF
0745	5	s/sb	TF
0915	15	sb	TF
0916	5	sb	TF
0935	30	sb	TF
0956	5	sb	TF
1045	7	sb	TF
1048	22	ST	Feeding
1109	20	s/sb	TF
1128	11	sb	TF
1146	14	s/sb	TF
1210	6	BFB	TF
1215	5	ST	TF
1238	14	s/sb	TF
1335	8	sb	TF
1420	10	s/sb	TF
1435	10	ST	TF
1500	6	sb	TF
1502	5	ST	TF
1720	300	ST 150 BFB 100 Fg 50	Feeding
1824	5	sb	TF

22 (515)

Nocturnal

Location	00-58 N ; 176-20 W — 00-45 N ; 176-04 W		
Observer	Crossin et. al.	Date	18-19 Nov. 66
		Time	18 ^{SS} 53 to 06 ^{SR} 27
Weather	wind ca. 25 knots.	Miles	105
		Hours	11.9

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
WR Leach's Storm Petrel	1	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	1	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	14	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear-Pet = 6
Pomarine Jaeger		Tern = 14
White-winged Petrel	1	Tropic bird = 1
Shear - Pet	1	Storm-Pet = 1
<u>Pterodroma sp.</u>	3	Booby = 1
		Total Birds 23
		Total Sightings
		Total Flocks 0
		Total Species 6

Southern Grid

Location	00-45N; 176-04W — 00-15N; 178-07W		
Observer	Crossin et. al.	Date	19 Nov. 1966
		Time	0627 ⁵² to 1841 ⁵⁵
Weather	seas rough.	Miles	127
		Hours	— 1 hr. 15 min. at Howland- = 11.0 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	5	<i>all dark phase</i>
Sooty Shearwater	3	
Slender-billed Shearwater	14	
b Christmas Island Shearwater	21	
Newell's Shearwater	1	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel <i>Habitat</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	5	
Bulwer's Petrel	1	
R Leach's Storm Petrel	8	
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby	72	<i>2 ad. w/ Blue Streamers, 5 im. w/B.S.</i>
Brown Booby	3	
Red-footed Booby	2	
Great Frigatebird sp.	17	
Lesser Frigatebird	17	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	693	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		<i>Shear - Pet = 63</i>
Pomarine Jaeger		<i>Storm Pet = 8</i>
Pterodroma sp.	9	<i>Tern = 693</i>
Shear Pet.	3	<i>Tropicbird = 3</i>
		<i>Booby = 77</i>
		<i>Frigate = 34</i>
		Total Birds 878
		Total Sightings
		Total Flocks <i>26 (744)</i>
		Total Species 13

Flocks

0735	6	ST	TF
0737	5	ST	TF
0742	7	ST	TF
0809	58	ST 55	SF
		F 8 3	
0835	44	ST 40	SF
		F 8 1	
		Sh. B 3	
0837	9	SB	TF
0924	7	BFB	TF
0927	5	BFB	TF
0935	7	BFB	TF
1055	27	ST	TF
1105	172	ST 150 BFB 10 LF 9 F 8 3	Feeding
1110	6	BFB	TF
1110	23	ST 22 BFB 1	TF
1113	30	ST	Feeding
1128	11	ST	TF
1133	6	BFB 5 BB 1	TF
1148	59	ST 56 F 3	Feeding
1202	5	ST	TF
1250	110	ST 100 F 2 LF 2 BFB 4 BB 1 WT 1	Feeding
1410	7	ST	TF
1420	12	S/SB	TF
1421	5	S/SB	TF
1438	54	ST 50 F 3 Ptero. 1	TF
1501	40	ST	TF
1532	20	ST 19 WT 1	SF
1646	9	ST	TF

26(744)

Nocturnal

Location	00-15'N; 178-07'W		— 00-26.5; 177-24'W	
Observer	Crossin et. al.		Date	19-20 Nov 66
			Time	1241 ³⁵ to 0631 ³²
Weather		Miles	109	Hours 11.8

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	
Sooty Shearwater		
Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel sp.	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	10	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		Shear Pet = 7
Pterodroma sp.	2	Storm Pet = 1
Bird	1	Tern = 10
Shear Pet	3	Misc = 1
		Total Birds 19
		Total Sightings
		Total Flocks 0
		Total Species 5

Southern Grid -

Location	0-26 S; 177-24 W — 0-01 S; 176-14 W		
Observer	Crossin et. al.	Date	20 Nov 66
		Time	0631 ^{SR} to 1834
Weather	Sea rough, mostly clear.	Miles	90
		Hours	12.1 - 50 min = 11.2 at Baker

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	45	all dark phase
Sooty Shearwater	1	
Slender-billed Shearwater	54	
S/Sb Christmas Island Shearwater	5	
Newell's Shearwater	1	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / Tahitian	3	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	6	
Bulwer's Petrel		
Leach's Storm Petrel	1	coll.
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby	9	
Brown Booby	1	
Red-footed Booby	44	
Great Frigatebird 80.	35	
Lesser Frigatebird	23	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	386	11 ad.s collected.
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
New Zealand Shearwater	1	Shear Pet = 122
Little Shearwater	1	Storm Pet = 8
White-winged Petrel	2	Tern = 386
Pterodroma p.	2	Tropicbird = 1
Shear Pet	1	Booby = 54
White Rumped SP	7	Frigate = 58
Sanderling	1	shorebird = 1
		coll. Total Birds 630
		Total Sightings
		Total Flocks 8 (540)
		Total Species 17

Feeding flocks = 3 (50%)

Flocks

1112	5	ST	TF
1300	7	Sb	TF
1300	189	ST 100 RFB 40 WT 20 Fg 22 BFB 7	Feeding
1340	10	Sb	TF
1406	9	ST	TF
1430	5	ST	TF
1640	154	ST 100 LF 20 WT 15 RFB 34 NS 1 Sb 4 Fg 10	Feeding
1825	161	ST 150 WT 8 LF 2 WRJP 1	Feeding

8 (540)

Nocturna

Location	0-015; 176-14W ——— 0-44 N; 176-31W		
Observer	Crossin et al.	Date	20-21 Nov 66
Weather	clear until 0100 - cloudy from then on.	Time	1834 ^{SS} to 0627 ^{SR}
	Miles	116	Hours 11.9

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
P-Leach's Storm Petrel	5	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	6	
Brown Booby		
Red-footed Booby	3	
Great Frigatebird g.	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	242	
Gray-backed Tern		
Common Noddy Tern		shear Pet = 7
Fairy Tern		Storm Pet = 5
Pomarine Jaeger		Tern = 243
Small Pterop.	2	Booby = 9
Shear Pet	5	Frigate = 1
Tern p.	1	
		Total Birds 265
		Total Sightings
		Total Flocks
		Total Species 6

Southern Grid
Last day

Location 00-4410-176-31W ——— 00-405; 176-12W
 Observer Crossin et. al. Date 21 Nov. 1966 Time 06^{5R}27 to 18⁵⁵36
 Weather mostly clear, sea rough. Miles 100 Hours 12.2 hrs -

1 hr 20 min Howland
and 50 min at Baker
= 10.0 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	8	all dark phase.
5/5 Sooty Shearwater	2	
Slender-billed Shearwater	7	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	17	
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
4BS Blue-faced Booby	73	4 imm. w/ Blue streamers.
Brown Booby	3	
Red-footed Booby		
Great Frigatebird	1	
Lesser Frigatebird	3	
Golden Plover		
Ruddy Turnstone	6	
Sooty Tern	242	
Gray-backed Tern		Shear-Pet = 41
Common Noddy Tern	1	Storm Pet = 3
Fairy Tern		Tern = 243
Pomarine Jaeger		Booby = 76
Pterodroma p.	5	Frigate = 32
Shear Pet	2	Shorebird = 6
WRSP	2	
Frigate sp.	28	
		Total Birds 401
		Total Sightings
		Total Flocks 15 (278)
		Total Species 11

Feeding Flocks (4 (173))

FLOCKS

0643	6	BFB	TF
0646	12	BFB	TF
0814	77	ST 60 BFB 12 Fg 4 BB 1	Feeding
0825	42	ST 40 Fg 2	Feeding
1149	6	RT	TF
1312	5	ST	TF
1324	5	Fg	TF
1348	7	WT 4 BFB 2 BB 1	Feeding
1414	23	ST	TF
1537	6	ST	TF
1545	8	ST	TF
1557	47	ST 39 Fg 8	Feeding
1617	18	ST	TF
1649	10	ST	TF
1720	6	ST	TF

15 (278)

Location 2-24 S; 173-33 W — 4-15 S; 174-50 W
Observer Crossin et. al. Date 22 Nov. 1966 Time ^{SR} 0620 to ^{SS} 1836
Weather Clear, sea choppy. Miles 121 Hours 12.3

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	17	all dark phase.
S/S Sooty Shearwater	1	
Slender-billed Shearwater	10	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel <i>Habitat</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	17	
Bulwer's Petrel	1	
Leach's Storm Petrel	2	
Red-tailed Tropicbird	12	
White-tailed Tropicbird		
Blue-faced Booby	5	
Brown Booby	1	
Red-footed Booby	1	
Great Frigatebird <i>80.</i>	77	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone	2	
Sooty Tern	964	
Gray-backed Tern		
Common Noddy Tern		Shear-Pet = 55
Fairy Tern	9	Storm Pet = 16
Pomarine Jaeger		Tern = 989
Audubon's Shear	1	Tropic bird = 14
<i>Pterodroma</i> sp.	4	Booby = 7
Shear-Pet	3	Frigate = 77
WRSP	14	Misc = 1
Tropicbird sp.	2	shorebird = 2
Bird	1	
Blue-gray Noddy	1	Total Birds 1161
Tern sp.	15	Total Sightings
		Total Flocks 36 (972)
		Total Species 16

Flocks

0715	5	ST	TF
0845	18	ST 16 FT 2	TF
0900	7	ST	TF
0915	116	ST 100, FT 1, Fg 6, P. sp. 1, WT 8,	Feeding
0921	43	ST 40, WT 2, Fg. 1	Feeding
0925	8	ST	Feeding
0932	5	ST	TF
0947	9	ST 8, FT 1.	SF
1007	23	ST	TF
1036	6 = 6	ST 5, Fg 1	TF
1040	5	ST	TF
1047	8	ST	TF
1049	7	ST	TF
1103	7	ST	TF
1112	5	ST	TF
1139	6	ST	TF
1143	15	Fg	TF
1145	107	ST 100, Fg 3, WT 4	Feeding
1150	347	ST 300, Fg 47	Feeding
1212	7	S. sp.	TF
1216	12	ST	TF
1253	9	ST	TF
1257	18	ST	TF
1317	9	ST	TF
1318	30	ST	TF
1324	52	ST 50, WT 1, FT 1,	Feeding
1428	8	ST	TF
1428	5	ST	TF
1520	15	ST	TF
1600	18	ST 16, Fg 1, FT 1	Feeding
1602	7	Sb	TF
1615	9	ST	TF
1633	8	ST FT. sp.	SF
1745	5	ST	TF
1813	5	ST	TF
1832	7	ST	TF

FLOCKS

0845	63	ST 60 CN 1 WT 1 BWP 1	Feeding
0910	111	ST 110 WT 1	Feeding
0911	30	ST	Feeding
0915	41	ST 36 FT 3 WT 1 P.8. 1	Feeding
0958	80	ST	Feeding
1005	10	ST	SF
1344	40	ST 35 FT 2 S-P 3	TF
1345	18	ST 15 FT 3	TF
1410	15	ST	SF
1425	6	ST	SF
1700	6	ST	TF

11 (420)

Location 9°-03'S, 172°-00W — 11-115 : 171-04W
 Observer Crossin et. al. Date 24 Nov. 1966 Time ^{SR} 05-57 to ^{SS} 1830
 Weather Clear, calm seas exp. in AM. Miles 105 Hours -1 hr. 25 min at Swains
= 11.1 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	11	all dark phase
Sooty Shearwater	1	
Slender-billed Shearwater	4	
s/sb Christmas Island Shearwater	26	
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / tabularian	2	
white winged Mottled Petrel	1	
ww/BW Bonin Island Petrel	2	
Black-winged Petrel	12	
Bulwer's Petrel	2	
WR Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird	2	
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	19	
Gray-backed Tern		
Common Noddy Tern	9	
Fairy Tern	23	
Pomarine Jaeger		Shear. Pet = 68
<u>Pterodroma</u> sp.	4	Storm Pet = 1
Shear pet	3	Tern = 51
		Tropicbird = 2
		Total Birds 122
		Total Sightings
		Total Flocks 2(43) with feeding
		Total Species 12

Flocks

1209

24

ST 15

FT 2

WT 6

P-go: 1

Feeding

1510

19

FT 15

cn 4

Feeding

2(43)

Last day 1st half.

Location	12-57 S ; 170-57 W	→	Pago Pago
Observer	Crossin et. al.	Date	25 Nov 66
		Time	05 ¹² 46 to 13 ⁰⁰ 45
Weather	squalls, sea rough.	Miles	74
		Hours	8.0 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	dark phase
Sooty Shearwater S/SB	3	
Slender-billed Shearwater	5	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel	1	
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel	1	
Black-winged Petrel	11	
Bulwer's Petrel Pterog.	2	
Leach's Storm Petrel Shearlet	1	
Red-tailed Tropicbird ♂	3	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	2	
Red-footed Booby	5	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern Haw Noddy	1	
Common Noddy Tern	38	
Fairy Tern	37	
Pomarine Jaeger		Shear Pet = 25 Tern = 76 Tropicbird = 3 Booby = 7
		Total Birds 111
		Total Sightings
		Total Flocks 5 (45)
		Total Species 11

FLOCKS

1256

8

CN 6 SF
PT 2

1304

10

CN 8 SF
PT 2

1316

9

PT 5
CN 3
PT 80 1

Feeding

1318

9

CN 6
PT 3

SF

1242

9

CN SF

1st day 2nd half.

Location	Pago Pago, Am-Samoa, → 13-50S ; 170-30W		
Observer	Crossin et al.	Date	29 Nov. 66 Time 16 ^{PP} 20 to 18 ⁵³ 36
Weather	Cloudy, Sea rough.	Miles	24 Hours 2 hrs. 16 min 2.3 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	6	all dark phase
Sooty Shearwater	1	
Slender-billed Shearwater	1	
Christmas Island Shearwater	1	
Newell's Shearwater	1	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel Pterodroma sp.	3	
Bonin Island Petrel	1	
Black-winged Petrel	2	
Bulwer's Petrel	1	
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird	1	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	36	
Great Frigatebird	3	
Lesser Frigatebird sp.	1	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	
Haw Noddy Gray-backed Tern sp.	25	
Common Noddy Tern	1117	Shear Pet = .17
Fairy Tern	87	Tern = 1230
Pomarine Jaeger		Tropicbird = 1
		Booby = 36
		Frigate = 4
		Total Birds 1288
		Total Sightings
		Total Flocks 9 (1248)
		Total Species 11

Flocks

1625	25	Temp.	Feeding
1725	8	FT 3 CN 4 RFB 1	SF
1735	8	RFB	TF
1755	956	CN 900 FT 35 RFB 20 HN 1	Feeding
1802	15	CN	SF
1804	10	CN	SF
1804	19	CN 18 RFB 1	SF
1806	192	CN 150 FT 40 RFB 1 F 1	Feeding
1815	15	CN	TF

9 (1248)

Flocks

1116

6

S/Sb

TF

1143

11

FT 7

SS 1

BWP 1

HN 1

CN 1

Feeding

1725

7

FT

SI

Flocks

1800

26

ST 24
WT 1
FT 1

Feeding

1807

19

ST

TF

1807

5

S/Sb

TF

1819

22

ST

Feeding

1832

5

ST

TF

Location 05-18.5; 170-43W → Phoenix Island.
Observer Crossin et al. Date 2 Dec-66 Time 0600^{SR} to 1545^{PF}
Weather clear, calm. Miles 95 Hours 9.8 hrs.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	7	all dark
5/56 Sooty Shearwater	7	
Slender-billed Shearwater	5	
Christmas Island Shearwater		
and Newell's Shearwater	4	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / Phoenix	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	2	
Bulwer's Petrel	2	
Leach's Storm Petrel	2	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	11 ^F	
Brown Booby		
Red-footed Booby	1	
Great Frigatebird	1	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone	1	
Sooty Tern	86	
Gray-backed Tern	2	
Common Noddy Tern		
Bl-gray Fairy Tern	2	shear - Pet = 28
Pomarine Jaeger		Storm Pet = 2
Tern sp.	1	Tern = 91
		Tropicbird = 2
		Booby = 12
		Frigate = 1
		Shorebird = 1
		Total Birds 135
		Total Sightings
		Total Flocks 4 (27)
		Total Species 14

Flocks

0626	7	ST	SF
0653	5	ST	TF
0754	10	ST	TF
1201	5	ST	TF

Flocks

0825	5	ST	TF
0855	7	ST	TF
0907	14	ST	TF
0914	5	ST 3 BGN 1 BFB 1	Feeding
1016	13	ST 12 Pp 1	SE
1036	6	ST 5 RFB 1	TF

6/50

Location Enderbury Island → 2-345 ; 172-24W
 Observer Crossin et al. Date 7 Dec. 66 Time 0810²² to 1830⁵⁵
 Weather Clear, calm. Miles 88 Hours 10.3

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	104	<u>all dark phase</u>
<u>New Zealand</u> Sooty Shearwater	1	
Slender-billed Shearwater		
Christmas Island Shearwater	1	
<u>Audubon's</u> Newell's Shearwater	3	
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird	3	
White-tailed Tropicbird		
Blue-faced Booby	83	
Brown Booby	24	
Red-footed Booby	4	
Great Frigatebird	10	
Lesser Frigatebird	1	
Golden Plover		
Ruddy Turnstone	6	
Sooty Tern	3104	
Gray-backed Tern	164	
Common Noddy Tern	328	Shear Pet = 110
Fairy Tern	17	Storm Pet = 8
Pomarine Jaeger	1	Tern = 3622
<u>White-rumped SP</u>	7	Tropicbird = 3
<u>Shear Pet</u>	1	Booby = 111
<u>Frigate sp.</u>	49	Frigate = 60
<u>Haw. Noddy</u>	9	Shorebird = 6
		Jaeger = 1
		Total Birds 3921
		Total Sightings
		Total Flocks 38 (3784)
		Total Species 18

FLOCKS

0812	5	RT	TF	1252	32	GBT 9
0827	9	ST	SF			CN 8 Feeding
0840	880	ST 600				ST 15
		CN 100		1350	27	ST 25
		GBT 100 Feeding				PS 1 Feeding
		Fp 30				GF 1
		BFB 50				ST 25
0920	6	HN	TF	1352	32	GF 7 SF
0923	61	ST 55		1353	25	ST Feeding
		HN 3		1400	7	ST SF
		WT 1 SF		1405	94	ST 90
		BFB 2				BFB 1 Feeding
0945	5	Fp 3F				Fp 3
0949	126	ST 120		1406	63	ST 60 Feeding
		Fp 2 Feeding				BFB 3
		WT 4				BFB 3
1017	96	ST 90		1410	12	ST 400
		Fp 3		1445	524	CN 100
		RFB 1 SF				WT 20 Feeding
		BFB 2				BFB 3
1040	191	ST 180 SF				FT 1
		RFB 1				
1100	92	ST SF		1513	107	ST 100
1103	184	ST 170				WT 4
		WT 5				BFB 3 Feeding
		Fp 2		1530	40	ST Feeding
		FT 2 Feeding		1540	100	ST Feeding
		GBT 3		1550	321	ST 300
		CN 1				WT 20 Feeding
		BFB 1				Fp 1 Feeding
1126	30	ST SF		1628	55	ST 65 Feeding
1128	12	ST TF				WT 20
1131	15	FT 2		1640	176	ST SF
		GBT 12 TF		1750	57	ST 55
		WT 1				LF 1 Feeding
1145	6	ST TF				GBT 1
1152	5	GBT TF		1800	18	ST Feeding
1205	86	ST 2		1810	24	ST 23 Feeding
		GBT 12				Fp 1 Feeding
		CN 65 TF		1820	141	ST 120
		FT 4				WT 20 Feeding
		BFB 3				BFB 1
1240	89	CN 52				
		GBT 11		1823	7	ST SF
		ST 8				
		GP 2 Feeding				
		BFB 3				
		BFB 5				
		FT 8				

Pre-Grid.

Location 01-45-5; 173-55 → E boundary S. Grid, 01-38-5; 175-00W
 Observer Crossin et al. Date 8 Dec 66 Time 0622 to 1200
 Weather calm, clear Miles Pre Grid Hours 5 hrs. 38 min.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
<i>Sooty</i> / Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel / <i>tahitian</i>	1	
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
<i>WR</i> Leach's Storm Petrel	4	
Red-tailed Tropicbird	1	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	48	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Shear Pet = 2
		Storm Pet = 4
		Tern = 48
		Tropicbird = 1
		Total Birds 55
		Total Sightings
		Total Flocks 2 (13)
		Total Species 5

Flocks

1017 5 ST TF

1125 8 ST TF

1st Day Southern Grid.

Location ^{38°S 175°-00} ~~01-35E; 173-55W~~ ^W - 01-315; 175-47W
 Observer Crossin et al. Date 8 Dec. 1966 Time ^{noon} 1200 to ⁵⁵ 1841
 Weather sea mod. rough, few clouds. Miles ~~72~~ 67 Hours 6 hrs. 41 min.

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	19	all dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
W Leach's Storm Petrel	2	
Red-tailed Tropicbird	2	1 collected - subad.
White-tailed Tropicbird		
Blue-faced Booby	1	
Brown Booby	1	
Red-footed Booby		
Great Frigatebird	9	2 whales
Lesser Frigatebird	2	
Golden Plover		large tuna beneath floes.
Ruddy Turnstone		
Sooty Tern	322	
Gray-backed Tern		
Common Noddy Tern	12	
Fairy Tern		
Pomarine Jaeger		
Blue-gray Noddy	1	collected.
		Shear-Pet = 19
		Storm-Pet = 2
		Tern = 335
		Tropicbird = 2
		Booby = 2
		Frigate = 11
		Total Birds 371
		Total Sightings
		Total Flocks 5 (342)
		Total Species 9
		Feeding Flocks = 3 (311)

Flocks

1325

171

ST 150

WT 12

Fg 8

BB 1

Feeding

1342

22

ST

TF-SF

1440

87

ST 85

LF 2

Feeding

1722

9

ST

SF

1836

53

ST 35

CN 12

WT 6

Feeding

5(342)

1st night - S. Grid

Nocturna

Location

01-315; 175-474
~~00-335; 176-5000~~

00-335; 176-50W

Observer

Crossin et al.

Date _____

8-9 Dec 66 Time 1845^{SS} to 0635^{SR}

Weather

Clear, calm

Miles

119

Hours 11 - 54

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
R Laysan Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	1	
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	44	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Storm Pet = 1
		Tern = 44
		Booby = 1
		Total Birds 46
		Total Sightings
		Total Flocks 0
		Total Species 3

Location 00-33 S; 176-50 W — 00-47 N; 176-48 W
 Observer Crossin et al. Date 9 Dec 1966 Time 0635^{SR} to 1843^{SS}
 Weather sea rough. Miles 97 Hours -20 min. Baker
4-48 Hours.
= 9-33

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	29	1 light phase, 28 dark
Sooty Shearwater		
Sooty/Slender-billed Shearwater	1	
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
LR Leach's Storm Petrel	12	
Red-tailed Tropicbird	4	
White-tailed Tropicbird		
BS Blue-faced Booby	36	1 Blue Streamlined imm.
Brown Booby		
Red-footed Booby	3	
Great Frigatebird	31	
Lesser Frigatebird	1	
Golden Plover		
Ruddy Turnstone	1	
Sooty Tern	882	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	8	
Pomarine Jaeger		shear Pet = 33
Pterodroma sp.	1	Storm Pet = 12
Shear - Pet	2	Tern = 890
Bristle-thighed Curlew	1	Tropicbird = 4
		Booby = 39
		Frigate = 32
		Shorebird = 2
		Total Birds 1012
		Total Sightings
		Total Flocks 21 (936)
		Total Species 12

FLOCKS

0815 28 ST 70
RT 3 Feeding
WT 5

09357 103 ST 50
WT 11 Feeding
Fp 2

0942 70 ST 55
FT 5
WT 8
Pp 1 Feeding
RFB 1

135-8 6 57 77

1510 20 ST 16
BF73 2 SF
F8 2

1514 15 ST SF

1516 31 51 30 FF
BFB 1

1520 7 BFB TF

1533 10 ST 71

1535 112 ST 110 SF
Fig 2

1751 240 ST 225
BFB X T F
F80 11

1754 33 5130
RAB 1 Feeding
Ry 2

1756 12 BFB TF

1758 52 57 50 Feeding
Exp 2

1801 25 ST TIA

1803
1807 15
1817 32 ST
1817 8 ST T/2
1817 31 ST 30
1821 18 ST 30 Feeding
1840 18 ST Feeding
1840 18 ST 14
1840 4 TF

Nocturno

Location	00-47 N; 176-48 W → Howland Island		
Observer	Crossin et al.	Date	9-10 Dec 66 Time 1843 ^{SE} to 0620 ^{HI}
Weather	mostly clear.	Miles	44 Hours 11-37

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby	19	
Brown Booby		
Red-footed Booby	2	coll 1 banded 747-55002
Great Frigatebird 8	2	
Lesser Frigatebird	2	1 coll.
Golden Plover		
Ruddy Turnstone		
3 Sooty Tern	464	27 coll. 3 banded, 1 b S
Gray-backed Tern		953-01140
Common Noddy Tern	1	1 coll. 793-72680
Fairy Tern		863-80697 + blue St.
Pomarine Jaeger		
		Total Birds 491
		Total Sightings
		Total Flocks
		Total Species 6

Location 00-48N; 176-39W — 01-29N; 177-59W
 Observer Crossin et. al. Date 10 Dec. 1966 Time ^{HI} 0800 to ^{SS} 1846
 Weather sea rough clear Miles 107 Hours 10-46

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	48	1 light phase, 47 dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
WR Leach's Storm Petrel	6	Banded
B Red-tailed Tropicbird	2	1 coll. 625-87418
White-tailed Tropicbird		
5BS Blue-faced Booby	28	5 blue-streamer
Brown Booby	6	
Red-footed Booby		
Great Frigatebird fo	29	
Lesser Frigatebird	17	
Golden Plover		
Ruddy Turnstone	1	
c Sooty Tern	439	1 subad. coll.
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Wilson's SP.	2	
		Shear Pet = 49
		Storm Pet = 8
		Tern = 439
		Tropicbird = 2
		Booby = 34
		Frigate = 46
		Shorebird = 1
		Total Birds 579
		Total Sightings
		Total Flocks 19 (523)
		Total Species 10

Flocks

Time	Count	Species	Activity
0811	15	BFB	TF
0830	8	Fg	SF
0831	7	ST	TF
0843	54	ST 45 BFB 6 BB 2 LF 1	Feeding
0941	9	ST	TF
0944	98	ST 80 Fg 8	SF
0945	25	ST	SF
1001	15	ST	SF
1115	18	ST 14 LF 4	TF
1130	22	ST 13 LF 7 WT 2	TF
1154	56	ST 50 Fg 3 WT 3	TF
1205	20	ST 15 Fg 5	Feeding
1250	26	ST 20 LF 2 WT 2 WRSP 2	Feeding
1410	7	ST	TF
1416	24	ST 14 WT 10	Feeding

1435-

82

ST 56
Fg 2
WT 23
WRSP 1

Feeding

1459

26

ST 18
WT 5
LF 3

Feeding

1621

1733

ST

ST

TR

Nocturnal

Location	1-29N; 177-59 W - 00-03N; 178-20 W		
Observer	Crossin et al.	Date	10-11 Dec 66 Time 1846 ⁵⁵ to 0643 ⁵⁸
Weather	Clear sea + wind hard	Miles	106 Hours 11-57

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Sooty Shearwater	2	
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone	1	
Sooty Tern	15	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Shear Pet	2	Shear pet = 4
		storm pet = 1
		Tern = 15
		Shorebird = 1
		Total Birds 21
		Total Sightings
		Total Flocks
		Total Species 4

Flocks

0715	13	ST	TF	
0834	12	ST	TF	
0955	10	ST	TF	
1330	20	ST 15		
		GBT 3		
		CN 1		Feeding
		WRSP 1		
1530	25	ST		Feeding
1542	40	ST	SF	
1553	17	ST	TF	

Nocturnal

Location	1-05 S ; 177-57W — 0-08 S ; 176-54W		
Observer	Crossin et al	Date 11-12 Dec 66	Time 18 ⁵⁵ 00 to 06 ⁵⁵ 37
Weather	mod. rough.	Miles 87	Hours 11-47

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby	1	
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	8	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Total Birds 9
		Total Sightings
		Total Flocks
		Total Species 2

Flocks

0730	8	ST 5 Fg 3	Feeding
0748	5	ST	SF
1140	23	ST	TF
1142	25	ST	Feeding
1144	9	ST	TF
1158	31	ST 30 Fg 1	TF
1202	42	ST 40 BFB 1 Fg 1	SF
1242	36	ST 33 Fg 3	Feeding
1246	12	ST 7 BFB 3 Fg 2	Feeding
1311	19	ST 18 BFB 1	Feeding
1329	5	BFB 4 BB 1	TF
1330	7	BFB	TF
1349	5	ST 1 BFB 3 BB 1	TF
1358	19	ST 18 BFB 1	TF
1402	10	ST	TF
1404	8	BFB	Feeding
1408	15	ST	TF
1414	10	ST	TF
1416	5	ST	TF
1603	213	ST 200 BFB 7 RFB 1 LF 5	TF
1608	51	ST 50 BFB 1	TF
1615	32	ST 30 RFB 1 BFB 1	TF

1620 212 ST 200
BFB 5
Fg 7 Feeding

1634 15 ST TF

1643 53 ST 50
BFB 3 TF

1650 29 ST 27
BFB 2 TF

1652 268 ST 1
BB 14
Fg 3 Feeding

1712 40 ST TF

1745 5 ST TF

Nocturna

Location	01-14 N; 176-39 W — 01-06 N; 176-14 W		
Observer	Crossin et. al.	Date	12-13 Dec 66 Time 1826 ⁵⁵ to 0636 ⁵⁸
Weather	wind ca. 15 knots; clear	Miles	86 Hours 12-10

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	2	
Red-tailed Tropicbird sp.	2	
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	19 20	
Gray-backed Tern	1	
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
Tern sp.	2	Storm Pet = 2 Tern = 22 Tropicbird = 2
		Total Birds 26
		Total Sightings
		Total Flocks 0
		Total Species 4

Location 01-06N; 176-14W — 0-30S; 176-13W
 Observer Crossin et. al. Date 13 Dec 66 Time 06⁵⁸36 to 18⁵⁵43
 Weather Clear, calm. Miles 97 Hours 12-07

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	1	dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel	1	1 coll.
Red-tailed Tropicbird	2	1 coll.
White-tailed Tropicbird		
Blue-faced Booby	76	1 coll. 568-70052 7 BS
Brown Booby	1	1 BP
Red-footed Booby	9	
Great Frigatebird	1	
Lesser Frigatebird	18	
Golden Plover		
Ruddy Turnstone		
Sooty Tern	242	1 coll.
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		Shear-Pet = 1
Pomarine Jaeger or Skua	1	Storm-Pet = 17
WRSP	16	Tern = 242
Frigate sp	37	Tropicbird = 2
		Booby = 86
		Frigate = 56
		Jaeger = 1
		Total Birds 405
		Total Sightings
		Total Flocks 12 (310)
		Total Species 10

Feeding Flocks = 4 (207)

FLOCKS

0717	5	BFB	TF
0745	93	ST 90	
		BFB 1	Feeding
		LF 2	
0756	7	ST	TF
0845	70	ST 15	
		LF 15	
		BFB 25	
		RFB 7	
		Fg 6	Feeding
		BB 1	
		WT 1	
0959	38	ST	Fg 30 SF
		13FB 8	
1253	24	ST	Feeding
1428	12	ST	TF
1517	23	ST 22	TF
		BFB 1	
1524	5	ST	TF
1542	6	ST	TF
1700	7	ST	TF
1819	20	ST	Feeding

last day southern Grid

Location	00-42N; 175-43W — 2-04N; 174-54W		
Observer	Crossin et. al.	Date	14 Dec 66
		Time	0633 ^{SR} to 1836 ^{SS}
Weather	Calm, clear	Miles	97
		Hours	12-03

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	5	all dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel <i>Habiti</i>	1	
Mottled Petrel		
<i>WW</i> Bonin Island Petrel	3	
Black-winged Petrel	1	
Bulwer's Petrel		
<i>WR</i> Leach's Storm Petrel	2	
Red-tailed Tropicbird	2	
White-tailed Tropicbird		
Blue-faced Booby	8	
Brown Booby		
Red-footed Booby		
Great Frigatebird <i>sp.</i>	6	
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	115	1 ad. coll.
Gray-backed Tern		
Common Noddy Tern	1	
Fairy Tern		
Pomarine Jaeger		
		Shear-Pet = 10
		Storm-Pet = 2
		Tern = 116
		Tropicbird = 2
		Booby = 8
		Frigate = 6
		Total Birds 144
		Total Sightings
		Total Flocks 8 (106)
		Total Species 10

Feeding Flocks = 2 (33)

Flocks

0715 9 ST 8 SF
Fg 1

0816 6 ST SF

1112 11 ST 10 SF
BWP 1

1309 5 ST SF

1448 14 ST 12 Feeding
BFB 2

1600 19 ST 15 Feeding
WT 4

1615 34 ST 28
Fsp 5 SF
CN 1

1803 8 ST TF

Location 03-22 N; 173-48 W — 04-32 N; 172-41 W
~~00-47 N; 175-43 W~~ — ~~02-04 N; 172-50 W~~
Observer Crossin et. al. Date 15 Dec 66 Time 0632^{SR} to 1823^{SS}
Weather Sea rough - rough - rough Miles 98 Hours 11-51

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	8	all dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	5	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel	3	<u>flocks</u> 1520 17 ST 9
Leach's Storm Petrel	5	WT 4
Red-tailed Tropicbird	1	TFP 3 SF
White-tailed Tropicbird		BP 1
Blue-faced Booby		
Brown Booby		
Red-footed Booby	1	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	9	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
shear - Pet	4	
Bird	1	
Ptero -	1	
		Total Birds 38
		Total Sightings
		Total Flocks
		Total Species 7

Nocturnal

Location 04-32 N; 172-41 W — 05-47 N; 171-32 W

Observer *Crossin et al*

Date 15-16 Dec 66 Time 18⁵⁵₂₃ to 0045

Weather *Sea rough, rough, rough*

Miles 53

Hours 6-22

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger		
		Total Birds ○
		Total Sightings
		Total Flocks
		Total Species

Location 08-06N; 169-14W — 0905N; 168-28W
Observer Crossin et al. Date 17 Dec. 1966 Time 0625^{SR} to 1759^{SS}
Weather sea rough, rough, rough. Miles 76 Hours 11-34

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	11	all dark phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	4	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel	2	
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby		
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		Feeding Flock
Gray-backed Tern		0900 62 tern sp 25
Common Noddy Tern		L. ptero 12
Fairy Tern		S. ptero 15
Pomarine Jaeger		WT 10
Shear-pet	1	
small Pterodroma	16	Shear-Pet = 48
large Pterodroma	13	Tern = 25
Tern sp.	25	
		Total Birds 73
		Total Sightings
		Total Flocks 1 (62)
		Total Species 5

Location	15-06N; 163-29W ——— 16-06N-162-38W		
Observer	Crossin et. al.	Date	21 Dec 66 Time 06 ⁵⁰ 15 to 17 ⁵⁵ 24
Weather	sea rough, rough, rough rain, rain, rain.	Miles	77 Hours 11-9

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross		
Wedge-tailed Shearwater	5	all light phase
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel	4	
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel	1	
Bulwer's Petrel		
Leach's Storm Petrel	1	
Red-tailed Tropicbird		
White-tailed Tropicbird		
Blue-faced Booby		
Brown Booby		
Red-footed Booby	2	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern	1	
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern	3	Shear Pet - 12
Pomarine Jaeger		Storm Pet - 2
WRSP	1	Tern - 4
Dark-rumped Petrel	1	Booby - 2
Shear pet	1	
		Total Birds 20
		Total Sightings
		Total Flocks 0
		Total Species 8

Last Day, SIC '60

Location	19-43 N; 159-14 W	→	Honolulu Harbour
Observer	Crossin et al.	Date	23 Dec 66 Time 0713 to 1758
Weather	much clearer, wind & sea down.	Miles	107 Hours 10-45

SPECIES	NUMBERS	REMARKS
Laysan Albatross		
Black-footed Albatross	/	
Wedge-tailed Shearwater		
Sooty Shearwater		
Slender-billed Shearwater		
Christmas Island Shearwater		
Newell's Shearwater		
Juan Fernandez Petrel		
White-necked Petrel		
Kermadec Petrel		
Phoenix Island Petrel		
Mottled Petrel		
Bonin Island Petrel		
Black-winged Petrel		
Bulwer's Petrel		
Leach's Storm Petrel		
Red-tailed Tropicbird		
White-tailed Tropicbird	3	
Blue-faced Booby		
Brown Booby		
Red-footed Booby	/	
Great Frigatebird		
Lesser Frigatebird		
Golden Plover		
Ruddy Turnstone		
Sooty Tern		
Gray-backed Tern		
Common Noddy Tern		
Fairy Tern		
Pomarine Jaeger	33	
Booby sp.	/	
Herald's Petrel	/	
		Total Birds 40
		Total Sightings
		Total Flocks 0
		Total Species 5